TABLE 19

Companies with domestic R&D paid for by the company and others and performed by the company in the software products and embedded software technology focus area, by industry and company size: 2017

(Millions of U.S. dollars)

				Software products and embedded software R&D											
								Paid for by others							
		Domestic R&D		Total				Paid for by the company						Federally funded	
Industry and company size	NAICS code	Companies ⁶ (number)	Amount	Compar (numb		Amoun		Compan (numbe		Amount	Compani (numbe		Amount	Companie (number	
All industries	21-23, 31-33, 42-	20,884	400,100	8,367	i	140,452		7,835	i	130,015	1,030	·• <i>)</i>	10,437	548	5,212
Manufacturing industries	31-33	12,151	257,227	3,623	i	36,804	i	3,493	i	32,084 i	350		4,719	i 60	3,140
Food	311	563	4,697 i			16	П	19		12	D		4	0	0
Chemicals	325	1,840	74,977	121		451		114		372	16		79	i 11	4
Basic chemicals	3251	269	2,574	10		9		10		9	0		0	0	0
Pharmaceuticals and medicines	3254	841	66,202	47		214	П	41		149	13		66	i D	3
Other chemicals	other 325	731	6,202	64	i	227	i	63	i	214 i	3		13	D	*
Plastics and rubber products	326	638	3,754	85	i	55		85	i	55	0		0	0	0
Nonmetallic mineral products	327	193	1,334	15	i	24	i	15	i	24 i	0		0	0	0
Fabricated metal products	332	1,260	2,206	254	i	152		223	i	149	D		3	0	0
Machinery	333	1,793	13,197	610	i	1,264		603	i	1,196	18		68	D	1 - 21
Agricultural implement	33311	183	1,570	42	i	255		42	i	253	D		2	D	2
Semiconductor machinery	333242	39	3,694	16		82	П	14		62 i	3		20	D	0 - 19
Engine, turbine, and power transmission equipment	3336	120	2,080	37	i	221	i	D		174 - 222 i	i D		0 - 48	D	0 - 19
Other machinery	other 333	1,452	5,853	515	i	705	П	D		658 - 706	D		0 - 48	i D	0 - 19
Computer and electronic products	334	1,793	78,575	1,261	i	25,571	i	1,224	i	23,593	166	i	1,978	28	1,181
Semiconductor and other electronic components	3344	471	30,148	243	i	6,402	i	225	i	6,161 i	44	i	241	i D	25
Other electronic products	other 334	1,322	48,427	1,018	i	19,169		998	i	17,432	122		1,737	D	1,156
Electrical equipment, appliances, and components	335	731	4,291	443	i	811	i	433	i	797 i	30	i	14	D	1
Transportation equipment	336	844	53,292	268	i	5,994	i	251	i	3,468	44		2,525	i 12	1,936
Automobiles, bodies, trailers, and parts	3361-63	396	23,881	87	i	1,733		72		1,506	31		228	D	0 - 228
Other transportation	other 336	449	29,410	181	i	4,260	i	179	i	1,963 i	13		2,298	i D	1,707 - 1,937
Miscellaneous manufacturing	339	1,428	15,695	397	i	2,243	П	379		2,204	40	i	38	D	0 - 19
Other manufacturing	312-16, 321-24, 331, 337	1,078	5,209	148	i	224		147	i	215	D		8	D	0 - 9
Nonmanufacturing industries	21-23, 42-81	8,736	142,874	4,744	i	103,648		4,342	i	97,931	680		5,718	488	2,072

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(Millions of U.S. dollars)

				Software products and embedded software R&D										
	NAICS code											Paid for	by others	
Industry and company size		Domes	Total Companies ^b (number) Amount				Paid for by the company			То	tal	Federally funded		
		Companies ^a (number) Amount				t	Companie (number		Amount	Companies (number)	Amount	Companie (number		
Mining, extraction, and support activities	21	117	3,150	38		500	i	36		444 i	5	56 i	0	0
Utilities	22	36	317	13		26		13		26	D	*	0	0
Wholesale trade	42	691	534	90	i	88	i	86	i	85 i	D	3	0	0
Information	51	2,527	80,252	2,217		71,664		2,189		70,563 i	109	1,100	55	79
Publishing	511	1,074	34,338	979	i	28,359		959	i	27,483	93	i 875	51	53
Telecommunications	517	D	3,682 - 3,806	76		2,914		D		2,773 - 2,911	D	4 - 140	0	0
Data processing, hosting, and related services	518	1,131	16,155	1,028		15,215		1,022		15,129	10	86	4	27
Other information	other 51	D	25,954 - 26,077	133		25,176	i	D		25,041 - 25,177 i	D	0 - 134	0	0
Professional, scientific, and technical services	54	4,304	36,922	2,132	i	14,169		1,764	i	9,612	559	4,557	433	1,992
Architectural, engineering, and related services	5413	1,265	2,708	424	i	685	i	320	i	208 i	150	i 477 i	116	i 326
Scientific research and development services	5417	1,035	17,321	363	i	3,055		191	i	292	249	2,763	209	907
Biotechnology research and development	541711	212	4,449	28		23	i	24		12	13	11 i	9	7
Other scientific research and development	other 5417	823	12,872	335	i	3,032		167	i	281	236	2,752	200	900
Other professional, scientific, and technical services	other 54	2,005	16,893	1,345	i	10,429		1,253	i	9,112	159	1,317	108	759
Health care services	621-23	177	1,101	17		91	i	17		91 i	0	0	0	0
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	885	20,598	237		17,110		237		17,109	D	1	0	0
All companies (number of domestic employees)	_	20,884	400,100	8,367	i	140,452		7,835	i	130,015	1,030	10,437	548	5,212
Small companies														
10-19 ^c	_	3,618	3,311	1,558	i	1,009	i	1,412	i	767 i	265	i 242	171	165
20-49	_	6,420	9,435	2,685	i	2,936		2,557	i	2,501	280	i 435	142	i 197
Medium companies														

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(Millions of U.S. dollars)

				Software products and embedded software R&D								
								Paid for by others				
		Domes	stic R&D	T	otal	Paid for by	the company	Total		Federally funded		
		Companies	a	Companie	sb	Companie	sb	Companies ^b		Companies ^b		
Industry and company size	NAICS code	(number)	Amount	(number)	Amount	(number)		(number)	Amount	(number) Amour		
50-99	_	3,806	10,141	1,509	i 3,098	1,387	i 2,438	191	660	108	312	
100-249	_	3,176	17,216	1,137	4,820	1,056	3,819	132	1,001	70	490	
Large companies												
250-499	_	1,475	14,103	478	4,512	455	4,056	48	456	17	77	
500-999	_	939	17,871	345	6,716	336	6,572	25	144	7	13	
1,000-4,999	_	984	65,112	427	22,861	413	21,299	45	1,561	11	703	
5,000-9,999	_	206	40,198	95	15,921	91	14,485	14	1,435	4	86 i	
10,000-24,999	_	154	73,485	79	20,374	i 75	18,848 i	18	1,525 i	9	725 i	
25,000 or more	_	105	149,227	53	58,206	51	55,229	12	2,977 i	7	2,445 i	

^{* =} amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

Note(s)

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D. Companies could report R&D in one, more than one, or no application area. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.

^a Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^b Statistics for the number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse. These company count estimates reflect a new imputation process implemented for survey year 2014. This change has affected the comparability of these company count estimates with estimates published for years prior to 2014. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^c Business Research and Development Survey does not include companies with fewer than 10 domestic employees.